

Manufacturers' Shipments, Inventories, and Orders

July 1976



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All figures in text below are in seasonally adjusted current dollars

New order for all manufactured products declined to \$95,146 million in July, a 0.5 percent or \$450 million decline, the Bureau of the Census, Department of Commerce, reported today. New orders for durable goods declined by 2.1 percent or \$1,063 million to \$48,863 million. The \$825 million downward revision in the July figure which was issued earlier this month was one of the largest revisions in recent months. It resulted from additional reports by companies that were unable to provide figures for the advance report.

This revision did not significantly affect the record increase in the nondefense capital goods new orders, originally reported at \$13,509 million and revised to \$13,398 million, a 13.2 percent or \$1,563 million increase from June, or the record decrease in the defense capital goods industries new orders, originally reported as \$1,075 million and revised to \$983 million, a 60.9 percent or \$1,534 million decrease from June. Industries reporting increases in nondefense capital goods new orders included nondefense complete aircraft, nondefense shipbuilding and railroad equipment, steam engines and turbines, office and store equipment (which includes computers), and special industrial machinery.

Shipments of all manufactured products were \$94,265 million, virtually unchanged from the June figure of \$94,244 million. Shipments of durable goods declined by 1.2 percent or \$604 million to \$47,871 million (previously reported as increasing 0.2 percent). This decrease, the first in eight months, is attributable to the motor vehicles and parts industries which declined by \$742 million or 8.7 percent to \$7,827 million. It was partially offset by an increase of \$363 million or 4.5 percent to \$8,391 million reported in the nonelectrical machinery industry. Shipments of nondurable industries rose by 1.4 percent or \$625 million to \$46,394 million. With the exception of the

textile mill industries, which declined by 3.5 percent, all of the nondurable goods industries rose by moderate amounts.

Inventories held by manufacturers' rose again in July to \$151,778 million, an \$867 million or 0.6 percent increase. Since the end of 1975, when inventories were reported as \$146,574 million, this series has risen 3.5 percent or \$5,204 million, and is now only slightly below the high in February 1975 of \$151,993 million. Most of the July increase was in the nondurable goods industries which increased \$644 million or 1.2 percent to \$53,939 million. In both durable and nondurable goods, increases in materials and supplies inventory and finished goods inventory accounted for the bulk of the change.

Unfilled orders for all manufactured products rose again in July to \$122,857 million, a 0.7 percent or \$883 million increase. Most of the increase was in the fabricated metals, nonelectrical machinery and transportation equipments industries.

SCHEDULED RELEASE DATES

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month. The advance report on durable goods for August is scheduled for release on September 22, 1976 and the full report is scheduled for release on October 1, 1976.

This report contains data on an unadjusted and seasonally adjusted basis. However, the data are not adjusted for price changes. For an explanation of terms used in this report see appendix following table 5.



U.S. Department of Commerce BUREAU OF THE CENSUS

Inquiries concerning these figures should be addressed to the U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233. For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233 or any Department of Commerce District Office. Price: 30 cents per copy, \$3.60 per year.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Shipments						Total inventories					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	July 1976 ^D	June 1976 ^r	May 1976	July 1976 ^P	June 1976 ^r	July 1975	July 1976 ^P	June 1976 ^r	May 1976	July 1976 ^P	June 1976 ^r	July 1975
All manufacturing industries:												
Total.....	94,265	94,244	94,087	87,895	99,510	76,991	151,778	150,911	149,039	150,974	150,953	146,494
Total, excluding transportation.....	83,219	82,382	82,700	78,151	86,785	69,064	129,908	128,881	127,391	129,568	129,391	125,456
Durable goods industries, total.	47,871	48,475	48,321	43,913	52,042	37,487	97,839	97,616	96,579	97,472	97,666	97,869
Stone, clay, and glass products..	2,403	2,389	2,352	2,366	2,615	2,216	3,729	3,654	3,610	3,759	3,715	3,680
Primary metals, total.....	7,685	7,713	7,595	7,021	8,206	5,520	14,854	14,674	14,442	14,610	14,505	14,057
Blast furnaces, steel mills..	3,986	4,093	3,927	3,703	4,290	2,780	8,573	8,410	8,186	8,367	8,225	7,644
Nonferrous metals.....	2,580	2,441	2,485	2,289	2,641	1,824	4,710	4,697	4,704	4,667	4,673	4,731
All other primary metals....	1,119	1,179	1,183	1,029	1,275	916	1,571	1,567	1,552	1,576	1,607	1,682
Fabricated metal products total.....	5,915	6,021	6,228	5,516	6,446	4,844	10,631	10,564	10,638	10,851	10,794	11,516
Metal cans, barrels, and drums.....	646	599	634	716	682	682	876	914	874	953	977	994
Machinery, except electrical, total.....	8,391	8,028	8,129	7,662	8,833	6,650	20,846	20,955	20,797	20,744	20,967	21,877
Engines and turbines.....	666	617	634	525	733	441	1,855	1,891	1,803	1,840	1,836	1,885
Farm machinery and equipment.	833	814	863	715	892	616	1,813	1,809	1,810	1,793	1,827	1,972
Construction, mining, and material handling equipment.	1,772	1,685	1,713	1,680	1,833	1,539	4,883	4,884	4,893	4,854	4,899	4,918
Metalworking machinery.....	546	520	548	477	585	459	1,544	1,585	1,583	1,540	1,577	1,820
General industrial machinery	923	911	912	864	1,009	712	1,980	1,981	1,949	1,982	2,003	2,058
Electrical machinery, total...	6,090	6,011	6,208	5,563	6,379	4,902	13,610	13,493	13,330	13,713	13,752	13,541
Electrical transmission and distribution equipment and industrial apparatus.....	1,225	1,231	1,241	1,133	1,333	936	2,984	2,919	2,887	2,994	2,937	2,953
Household appliances.....	858	864	863	854	943	791	1,248	1,251	1,233	1,255	1,285	1,121
Radio and TV.....	542	457	690	464	529	411	1,021	1,022	969	1,073	1,083	1,037
Communication equipment.....	1,333	1,270	1,318	1,216	1,356	1,172	4,156	4,150	4,099	4,135	4,191	4,184
Transportation equipment, total	11,046	11,862	11,387	9,744	12,725	7,927	21,870	22,030	21,648	21,406	21,562	21,038
Motor vehicles and parts....	7,827	8,569	8,009	6,685	9,210	5,012	6,494	6,622	6,388	6,058	6,238	5,836
Aircraft, missiles, and parts.....	2,059	2,168	2,191	1,965	2,274	1,886	11,770	11,848	11,855	11,712	11,817	11,720
Shipbuilding and railroad equipment.....	591	604	618	530	614	534	2,800	2,758	2,682	2,847	2,725	2,787
Instruments and related products, total.....	1,661	1,592	1,571	1,549	1,692	1,319	3,787	3,786	3,767	3,842	3,878	3,980
Scientific and engineering..	866	825	841	805	886	679	1,993	1,983	1,943	2,009	2,014	1,981
All other instruments and related products.....	795	767	730	744	806	640	1,794	1,803	1,824	1,833	1,864	1,999
All other durable goods industries.....	4,680	4,859	4,851	4,492	5,146	4,109	8,512	8,460	8,347	8,547	8,493	8,180
Nondurable goods industries, total.....	46,394	45,769	45,766	43,982	47,468	39,504	53,939	53,295	52,460	53,502	53,287	48,625
Food and kindred products, total.....	14,801	14,724	14,532	14,203	15,137	13,346	12,201	11,968	11,839	11,796	11,612	10,335
Meat products.....	3,066	3,130	3,169	3,032	3,152	3,053	1,367	1,376	1,367	1,336	1,391	1,185
Fats and oils.....	1,443	1,293	1,254	1,361	1,319	1,096	1,097	1,082	1,026	1,012	1,033	647
Tobacco products.....	609	610	595	622	657	621	3,448	3,419	3,396	3,158	3,269	2,858
Textile mill products.....	3,179	3,293	3,362	2,719	3,496	2,482	4,761	4,750	4,728	4,822	4,903	4,296
Paper and allied products, total.....	3,964	3,938	3,995	3,733	4,116	3,185	4,881	4,866	4,799	4,956	4,931	4,557
Pulp, paper, etc.....	1,871	1,851	1,883	1,784	1,916	1,432	1,867	1,869	1,829	1,880	1,885	1,743
Paperboard containers.....	843	857	868	796	901	757	1,287	1,302	1,281	1,315	1,314	1,182
All other paper containers..	1,250	1,230	1,244	1,153	1,299	996	1,727	1,695	1,689	1,761	1,732	1,632
Chemicals and allied products, total.....	8,050	7,893	7,867	7,405	8,376	6,630	11,636	11,365	11,214	11,644	11,355	10,697
Industrial chemicals, except pigments.....	2,732	2,674	2,686	2,577	2,826	2,141	3,290	3,213	3,153	3,273	3,161	2,938
Drugs, soap, and toiletries.	2,264	2,241	2,191	2,040	2,248	1,882	3,752	3,627	3,635	3,831	3,736	3,674
Petroleum and coal products...	6,377	6,186	6,037	6,318	6,305	5,427	4,553	4,558	4,361	4,524	4,492	4,118
Rubber and plastics products, o.e.c.....	2,207	2,170	2,215	2,036	2,320	1,910	2,992	3,009	3,022	2,946	3,006	2,974
All other nondurable goods industries.....	7,207	6,955	7,163	6,946	7,061	5,903	9,467	9,360	9,101	9,656	9,719	8,790

See footnotes at end of table.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP--Continued

(Millions of dollars)

Industry group	New orders						Unfilled orders					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	July 1976 ^P	June 1976 ^T	May 1976 ^T	July 1976 ^P	June 1976 ^T	July 1975	July 1976 ^P	June 1976 ^T	May 1976 ^T	July 1976 ^P	June 1976 ^T	July 1975
All manufacturing industries:												
Total ²	95,146	95,596	95,378	90,054	100,246	78,524	122,857	121,974	120,624	123,068	120,907	123,807
Total, excluding transportation.....	83,582	83,678	84,094	78,861	87,760	69,311	90,986	90,620	89,324	90,991	90,282	91,031
Durable goods industries, total ²	48,863	49,926	49,565	46,191	52,935	38,839	117,459	116,465	115,015	117,609	115,329	119,417
Primary metals, total.....	7,644	8,075	8,805	6,960	8,446	5,374	15,745	15,785	15,424	15,604	15,666	14,295
Blast furnaces, steel mills.	3,952	4,305	4,985	3,627	4,500	2,623	10,654	10,687	10,476	10,558	10,634	9,065
Nonferrous metals.....	2,573	2,597	2,651	2,324	2,691	1,860	3,276	3,283	3,127	3,240	3,205	2,684
Fabricated metal products.....	6,157	6,075	6,094	5,733	6,484	4,742	16,883	16,642	16,587	16,900	16,683	18,270
Machinery, except electrical, total.....	8,718	7,992	8,033	7,846	8,682	6,583	24,237	23,908	23,942	24,110	23,925	26,745
Engines and turbines.....	900	641	765	737	719	507	7,016	6,781	6,756	6,982	6,770	6,902
Construction, mining, and material handling equipment.	1,758	1,650	1,612	1,610	1,818	1,492	5,022	5,036	5,974	5,052	5,122	6,658
Metalworking machinery.....	546	518	515	498	584	393	1,530	1,529	1,532	1,533	1,513	1,920
General industrial machinery.	1,035	931	917	909	966	720	3,509	3,397	3,376	3,422	3,376	3,538
Electrical machinery, total...	5,989	6,657	6,618	5,987	6,932	5,268	20,029	20,131	19,486	20,100	19,678	19,154
Electrical transmission and distribution equipment and industrial apparatus.....	1,296	1,215	1,257	1,193	1,349	968	5,486	5,416	5,433	5,512	5,452	5,793
Household appliances.....	857	870	865	860	939	807	135	136	131	134	129	146
Radio and TV.....	641	471	691	561	578	473	520	420	406	552	455	438
Communication equipment.....	1,108	1,894	1,665	1,486	1,801	1,362	8,132	8,358	7,733	8,072	7,803	7,099
Transportation equipment, total ²	11,564	11,918	11,284	11,193	12,486	9,213	31,871	31,354	31,300	32,077	30,625	32,776
Aircraft, missiles, and parts.....	2,018	2,089	2,135	2,742	2,133	3,009	19,480	19,520	19,600	19,858	19,079	21,232
Shipbuilding and railroad equipment.....	1,101	671	460	1,032	610	586	8,604	8,095	8,029	8,518	8,015	8,290
All other durable goods industries.....	8,791	9,209	8,731	8,472	9,905	7,656	8,694	8,645	8,276	8,818	8,752	8,177
Nondurable goods industries, total.....	46,283	45,670	45,813	43,863	47,311	39,685	5,398	5,509	5,609	5,459	5,578	4,390
Industries with unfilled orders.....	10,733	10,691	10,954	9,822	11,039	8,941	5,398	5,509	5,609	5,459	5,578	4,390
Industries without unfilled orders.....	35,550	34,979	34,859	34,041	36,272	30,744	-	-	-	-	-	-

- Represents zero. ^P Preliminary. ^T Revised.¹Adjusted for trading-day and calendar-month variations.²See footnote⁴ at end of table 2.

Table 2.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, FOR MARKET CATEGORIES AND SUPPLEMENTARY SERIES
(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment		
	July 1976 ^p	June 1976 ^r	May 1976 ^r	July 1976 ^p	June 1976 ^r	July 1975	July 1976 ^p	June 1976 ^r	May 1976 ^r	July 1976 ^p	June 1976 ^r	July 1975
	Shipments						Total inventories					
All manufacturing industries, total..	94,265	94,244	94,087	87,895	99,510	76,991	151,778	150,911	149,039	150,974	150,953	146,494
Durable goods industries, total.....	47,871	48,475	48,321	43,913	52,042	37,487	97,839	97,616	96,579	97,472	97,666	97,869
Nondurable goods industries, total.....	46,394	45,769	45,766	43,982	47,468	39,504	53,939	53,295	52,460	53,502	53,287	48,625
Industry groups arranged by market categories:												
Home goods and apparel.....	8,346	8,303	8,879	7,856	8,661	7,035	13,931	13,847	13,509	14,207	14,416	12,906
Consumer staples.....	18,199	18,157	17,923	17,339	18,593	16,381	20,065	19,663	19,532	19,551	19,324	18,012
Equipment and defense products, except automotive.....	12,362	11,959	12,198	11,456	12,973	10,233	37,891	37,902	37,555	37,810	37,951	38,762
Automotive equipment.....	9,072	9,728	9,262	7,875	10,545	6,123	7,961	8,149	7,905	7,494	7,735	7,373
Construction materials, supplies, and intermediate products.....	7,364	7,327	7,433	7,267	8,048	6,295	12,575	12,448	12,509	12,631	12,554	12,802
Other materials and supplies and intermediate products ³	38,922	38,770	38,392	36,102	40,690	30,924	59,355	58,902	58,029	59,281	58,973	56,639
Supplementary series: ²												
Household durable goods industries.....	3,565	3,605	3,894	3,183	3,808	3,008	6,697	6,666	6,496	6,831	6,844	6,525
Capital goods industries.....	13,701	13,492	13,589	12,677	14,559	11,377	42,561	42,668	42,371	42,519	42,751	43,390
Nondefense.....	11,957	11,762	11,666	10,958	12,737	9,835	33,991	34,195	34,099	33,937	34,308	35,930
Defense.....	1,744	1,730	1,923	1,719	1,822	1,542	8,570	8,473	8,272	8,582	8,443	7,460
	New orders						Unfilled orders					
All manufacturing industries, total ⁴ .	95,146	95,596	95,378	90,054	100,246	78,524	122,857	121,974	120,624	123,068	120,907	123,807
Durable goods industries, total ⁴	48,863	49,926	49,565	46,191	52,935	38,839	117,459	116,465	115,015	117,609	115,329	119,417
Nondurable goods industries, total.....	46,283	45,670	45,813	43,863	47,311	39,685	5,398	5,509	5,609	5,459	5,578	4,390
Industry groups arranged by market categories:												
Home goods and apparel.....	8,480	8,306	8,863	8,118	8,695	7,232	2,572	2,407	2,389	2,687	2,402	2,370
Consumer staples.....	18,229	18,173	17,922	17,365	18,591	16,384	-	-	-	-	-	-
Equipment and defense products, except automotive ⁴	12,959	12,968	12,289	13,071	13,798	11,201	61,378	60,734	59,656	61,503	59,717	62,091
Automotive equipment.....	9,121	9,796	9,373	8,045	10,451	6,234	-	-	-	-	-	-
Construction materials, supplies, and intermediate products.....	7,543	7,306	7,298	7,419	8,050	6,117	15,087	14,908	14,928	15,182	15,029	16,542
Other materials and supplies and intermediate products.....	38,814	39,047	39,633	36,036	40,661	31,356	43,820	43,925	43,651	43,696	43,759	42,804
Supplementary series: ²												
Household durable goods industries.....	3,663	3,636	3,889	3,400	3,873	3,185	1,822	1,723	1,692	1,929	1,714	1,730
Capital goods industries ⁴	14,381	14,352	13,614	14,408	15,107	12,700	68,594	67,912	67,052	68,699	66,965	71,080
Nondefense.....	13,398	11,835	11,664	12,325	12,714	9,750	42,737	41,292	41,221	42,638	41,267	45,434
Defense ⁴	983	2,517	1,950	2,083	2,393	2,950	25,857	26,620	25,831	26,061	25,698	25,646

¹During 1968 manufacturers in ordnance, communications, aircraft and aircraft parts, and shipbuilding industries began to provide aggregate figures on shipments, orders, and total inventories of work performed for the Department of Defense. The results of these reports are included in the defense series. ²Preliminary. ³Revised. ⁴Shipments and new orders adjusted for trading-day and calendar-month variations; unfilled orders and inventories as of end of month. ⁵The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries - Household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; ophthalmic goods, watches, and clocks; and miscellaneous personal goods.
Capital goods industries - The capital goods industries series is comparable to the previous Producers' Capital Goods and the Defense Products (old series) categories.
Nondefense products - Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding household appliances and electronic components), and the nondefense portions of shipbuilding and repairing and railroad equipment, communication equipment, aircraft and aircraft parts, and ordnance.
Defense products - Based on separate reports on defense work filed by large defense contractors in the following industries: ordnance, communications, aircraft and aircraft parts, and shipbuilding. The data are comparable to those published annually in the MA-175, Shipments of Defense-Oriented Industries, for the specified industries.

³This reflects a revision to the inventory figure for July 1975 for (Other materials and supplies and intermediate products). The unadjusted figure for July 1975 is: Inventories, 56,639.

⁴These data reflect revised unfilled and new orders data reported by aircraft companies.

Item and month	New orders		Unfilled orders		Item and month	New orders		Unfilled orders	
	Adjusted	Unadjusted	Adjusted	Unadjusted		Adjusted	Unadjusted	Adjusted	Unadjusted
ALL MANUFACTURING INDUSTRIES, TOTAL					CAPITAL GOODS				
April.....	94,090	95,623	119,340	120,578	April.....	13,623	13,646	67,030	67,243
May.....	95,378	94,457	120,624	120,175	May.....	13,614	12,971	67,052	66,416
DURABLE					DEFENSE				
April.....	47,790	48,896	113,778	114,902	April.....	2,093	1,913	25,805	25,649
May.....	49,565	48,896	115,015	114,436	May.....	1,950	1,387	25,831	25,127
TRANSPORTATION									
April.....	11,521	11,768	31,404	31,485					
May.....	11,284	11,341	31,300	30,866					

Table 3.--MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS MONTH-TO-MONTH AND LONG TERM PERCENT CHANGES

(Based on seasonally adjusted data)

Item and industry group	Month-to-month			Average monthly rates of change				Average, 1970-1975	
	June- July 1976	May- June 1976	Apr.- May 1976	3 months			12 months July 1975- July 1976	Average rise	Average decline
				Apr.- July 1976	Jan.- Apr. 1976	Oct. 1975- Jan. 1976			
Shipments:									
All manufacturing industries.....	+0.0	+0.2	+0.3	+0.2	+1.7	+0.7	+1.1	+1.4	-1.6
Durable goods industries, total.....	-1.2	+0.3	+1.2	+0.1	+2.3	+0.7	+1.2	+1.5	-2.2
Nondurable goods industries, total.....	+1.4	+0.0	-0.7	+0.2	+1.0	+0.7	+0.9	+1.5	-1.2
Total inventories:									
All manufacturing industries.....	+0.6	+1.3	+0.6	+0.8	+0.3	+0.1	+0.3	+0.9	-0.3
New orders:									
All manufacturing industries.....	-0.5	+0.2	+1.4	+0.4	+2.2	+0.7	+1.1	+1.8	-1.9
Durable goods industries, total.....	-2.1	+0.7	+3.7	+0.8	+3.5	+0.7	+1.4	+2.4	-2.7
Nondurable goods industries, total.....	+1.3	-0.3	-1.1	-0.0	+1.0	+0.7	+0.9	+1.5	-1.3
Unfilled orders:									
Durable goods industries, total.....	+0.9	+1.3	+1.1	+1.1	-0.1	-0.7	-0.1	+1.7	-1.2

Table 4.--VALUE OF MANUFACTURERS' INVENTORIES, BY STAGE OF FABRICATION, BY INDUSTRY GROUP

('Millions of dollars')

Industry group	Seasonally adjusted			Without seasonal adjustment			Seasonally adjusted			Without seasonal adjustment		
	July 1976 ^P	June 1976 ^r	May 1976	July 1976 ^P	June 1976 ^r	July 1975	July 1976 ^P	June 1976 ^r	May 1976	July 1976 ^P	June 1976 ^r	July 1975
	Total						Materials and supplies					
All manufacturing industries, total..	151,778	150,911	149,039	150,974	150,953	146,494	52,869	52,474	51,951	52,623	52,108	51,138
Durable goods industries, total.....	97,839	97,616	96,579	97,472	97,666	97,869	31,716	31,539	31,335	31,718	31,329	32,211
Stone, clay, and glass products.....	3,729	3,654	3,610	3,759	3,715	3,680	1,322	1,314	1,303	1,322	1,313	1,416
Primary metals.....	14,854	14,674	14,442	14,610	14,505	14,057	6,622	6,675	6,598	6,522	6,532	6,369
Machinery (electrical and nonelectrical)	34,456	34,448	34,127	34,457	34,719	35,418	10,048	10,019	10,078	10,199	10,082	10,879
Transportation equipment.....	21,870	22,030	21,648	21,406	21,562	21,038	5,107	4,983	4,737	4,764	4,764	4,467
All other durable goods industries.....	22,930	22,810	22,752	23,240	23,165	23,676	8,617	8,548	8,619	8,911	8,638	9,080
Nondurable goods industries, total.....	53,939	53,295	52,460	53,502	53,287	48,625	21,153	20,935	20,616	20,905	20,779	18,927
Chemicals and allied products.....	11,636	11,365	11,214	11,644	11,355	10,697	4,388	4,339	4,325	4,404	4,322	4,444
Petroleum and coal products.....	4,553	4,558	4,361	4,524	4,492	4,118	1,285	1,284	1,200	1,289	1,293	1,002
Rubber and plastics products, n.e.c.....	2,992	3,009	3,022	2,946	3,006	2,974	1,256	1,217	1,166	1,265	1,219	1,028
All other nondurable goods industries....	34,758	34,363	33,863	34,388	34,434	30,836	14,224	14,095	13,925	13,947	13,945	12,453
	Work in process						Finished goods					
All manufacturing industries, total..	49,779	49,760	49,201	49,550	49,561	49,254	49,130	48,677	47,887	48,801	49,284	46,102
Durable goods industries, total.....	41,485	41,524	41,132	41,224	41,262	41,769	24,638	24,553	24,112	24,530	25,075	23,889
Stone, clay, and glass products.....	555	542	537	558	554	513	1,852	1,798	1,770	1,879	1,848	1,751
Primary metals.....	4,768	4,682	4,597	4,701	4,628	4,430	3,464	3,317	3,247	3,387	3,345	3,258
Machinery (electrical and nonelectrical)	14,672	14,670	14,503	14,558	14,646	15,083	9,736	9,759	9,546	9,700	9,991	9,456
Transportation equipment.....	14,785	14,994	14,903	14,708	14,755	14,678	1,978	2,053	2,008	1,934	2,043	1,893
All other durable goods industries.....	6,705	6,636	6,592	6,699	6,679	7,065	7,608	7,626	7,541	7,630	7,848	7,531
Nondurable goods industries, total.....	8,294	8,236	8,069	8,326	8,299	7,485	24,492	24,124	23,775	24,271	24,209	22,213
Chemicals and allied products.....	1,903	1,857	1,813	1,891	1,864	1,744	5,345	5,169	5,076	5,349	5,169	4,509
Petroleum and coal products.....	1,206	1,216	1,203	1,213	1,234	1,064	2,062	2,058	1,958	2,022	1,965	2,052
Rubber and plastics products, n.e.c.....	505	494	483	502	491	495	1,231	1,298	1,373	1,179	1,296	1,451
All other nondurable goods industries....	4,680	4,669	4,570	4,720	4,710	4,182	15,854	15,599	15,368	15,721	15,779	14,201

^PPreliminary.
^rRevised.

Table 5.--RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP

(Based on seasonally adjusted data¹)

Industry group	Inventories - shipments ratio				Unfilled orders - shipments ratio ¹ months' backlog			
	July 1976 ^p	June 1976 ^r	May 1976	July 1975	July 1976 ^p	June 1976 ^r	May 1976 ^r	July 1975
All manufacturing industries, total.....	1.61	1.60	1.58	1.77	2.35	2.33	2.35	2.72
Durable goods industries, total.....	2.04	2.01	2.00	2.37	2.83	2.80	2.84	3.33
Stone, clay, and glass products.....	1.55	1.53	1.53	1.62	(NA)	(NA)	(NA)	(NA)
Primary metals.....	1.93	1.90	1.90	2.36	2.05	2.05	2.03	2.39
Fabricated metals.....	1.80	1.75	1.71	2.18	3.20	3.07	2.97	3.99
Machinery, except electrical.....	2.48	2.61	2.56	3.02	2.80	2.98	2.95	3.69
Electrical machinery.....	2.23	2.24	2.15	2.50	3.29	3.35	3.14	3.56
Transportation equipment.....	1.98	1.86	1.90	2.26	5.66	5.37	5.39	6.66
Instruments and related products.....	2.28	2.38	2.40	2.78	(NA)	(NA)	(NA)	(NA)
Nondurable goods industries, total.....	1.16	1.16	1.15	1.18	0.50	0.51	0.51	0.45
Food and kindred products.....	0.82	0.81	0.81	0.77	(X)	(X)	(X)	(X)
Tobacco products.....	5.66	5.60	5.71	5.14	(X)	(X)	(X)	(X)
Textile mill products.....	1.50	1.44	1.41	1.47	(NA)	(NA)	(NA)	(NA)
Paper and allied products.....	1.23	1.24	1.20	1.33	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products.....	1.45	1.44	1.43	1.48	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.71	0.74	0.72	0.76	(X)	(X)	(X)	(X)
Rubber and plastics products, n.e.c.....	1.36	1.39	1.36	1.46	(X)	(X)	(X)	(X)

NA¹ Not available. ^pPreliminary. ^rRevised. (X)¹ Not applicable.¹Excludes the following industries with no unfilled order: Wooden containers; glass containers; metal cans, barrels and drums; motor vehicle assembly operations; foods and related products; tobacco; apparel and related products; chemicals; petroleum and coal products; and rubber and plastics products, n.e.c.

Appendix

The following is a description of the survey and definitions used. These are provided to clarify the meaning of the items involved and do not represent any revisions from those definitions previously employed.

DESCRIPTION OF SURVEY

The Manufacturers' Shipments, Inventories, and Orders survey provides monthly figures that are comparable to the annual totals published each year in the Annual Survey of Manufactures (ASM). The ASM is based on a sample of approximately 60,000 manufacturing establishments drawn from the 5-year census universe of about 310,000 establishments. In the ASM, each manufacturing establishment provides data on employment, payrolls, shipments, cost of materials, capital expenditures, and inventories as well as other selected items. The establishments do not provide information on unfilled orders or new orders. Since the ASM is establishment based, it provides data for each of the 425 manufacturing industries in the Standard Industrial Classification System (SIC) and area data for industry groups.

The monthly survey M3-1 does not provide information at the complete SIC industry detail because of the smaller size of the reporting panel and the fact that most companies cannot provide shipments, inventories, and orders data monthly for individual establishments.

The monthly reporting panel consists of approximately 5,000 reporting units and includes virtually all companies with 1,000 or more employees and a sample of the smaller ones. The reporting unit typically comprises the entire operations of a company although many of the larger diversified companies file separate divisional type reports for their operations in different industries.

Most of the reporting units include mixed industry activity even within the broad industry categories of the monthly survey. The survey methodology assumes that the month-to-month changes of the reporting units classified in each industry category represent effectively the month-to-month movements of the establishments in the SIC industries which make up the category. Thus, the monthly reports are used to update the ASM estimates by using a link relative of matched companies in each industry.

EXPLANATION OF TERMS

Value of Shipments—Shipments in the monthly survey are equivalent to value of shipments as reported

in the ASM which are received or receivable net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments are the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts of establishments in the industry for contract work performed for others, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the aircraft industry and shipbuilding, the value of work done in a given year varies considerably from the value of shipments because of the long lead time between the input of the materials and labor and the shipments of the completed aircraft or ship. In the annual survey, therefore, the value of work done during the year is requested rather than the value of shipments.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. With the exception of motor vehicles, it is not significant at the 4-digit SIC group level. Since the M3-1 industry categories typically are groupings of industries, this duplication is significant for the all manufacturing, durable goods and nondurable goods categories and the various market groups. The significance of the duplication within the specific M3-1 industry groups varies depending on the 4-digit industry composition of these groups. It is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

Since most monthly reports are for the entire company or major divisions rather than establishments, the companies are requested to report net sales, i.e., total company billings after discounts and allowances. Companies which file divisional reports are requested to treat transfers from one division of the company to another as if they were net sales to outside customers. Although this definition of shipments in the monthly reports differs from that used in the annual establishment reports, it is assumed that the month-to-month changes in company sales in the industry are representative of the month-to-month shipments of the establishments in the industry.

Inventories—End-of-month inventories in the monthly survey are identical in definition to the end-of-year inventories in the ASM. In the ASM, respondents are asked to report inventories of individual establishments at approximate current cost if

feasible; otherwise, "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the aggregate inventories for establishments in an industry is not precise. The figures on the change in inventories from one period to the next are of greater significance than the actual aggregates.

Inventories are reported by stage of fabrication: (a) finished goods; (b) work in process; and (c) materials, supplies, fuel, and other inventories. In using inventories by stage of fabrication at the all manufacturing and 2-digit industry levels as well as for the durable and nondurable goods sectors, it should be noted that a finished product of one industry may be a raw material for another industry at the next stage of fabrication. Insofar as the durable and nondurable goods sectors and also the 2-digit industry groups contain industries with successive stages of processing, the same type of commodity may be included under different inventory categories in the aggregate statistics.

New Orders Received and Unfilled Orders—Orders as reported in the monthly survey are net of cancellations during the month. They include orders received during the period and also filled during the period as well as those orders received for future delivery. They

also include the net sales value of contract change documents which increase or decrease the sales value of the unfilled orders to which they relate. Orders include only those supported by binding legal documents such as signed contracts, or letter contracts. In case of letter contracts the full amount of the sales value is included if the parties are in substantial agreement on the amount; otherwise, only the funds specifically authorized to be expended are included. The respondent is instructed to deduct the sales value of partial or complete cancellation of existing orders.

Unfilled orders include orders as defined above that have not yet passed through the sales account. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the beginning of the period plus net new orders received less net sales.

While both new orders and unfilled orders are used in reviewing individual company reports for consistency, only unfilled orders are estimated directly in the tabulated totals. New orders are derived from the shipments plus net change in unfilled orders for each industry category. This procedure is followed for seasonally adjusted data as well as for the unadjusted data. Shipments and unfilled orders are seasonally adjusted independently. Seasonally adjusted new orders are derived from seasonally adjusted shipments and seasonally adjusted unfilled orders.